

parts of the leaf showing the mode of division of the petiole. As a number of figures would be necessary to show the entire leaf a restoration of it is shown in the accompanying text-figure. This restoration is based entirely upon material representing all parts of the leaf and is therefore not hypothetical in any particular.

It is named in honor of Prof. E. A. Smith, the efficient state geologist of Alabama. Leaflets of this species, nearly all of which are terminal, are also common in the Middendorf clays near Langley, South Carolina.

This species is markedly distinct from the American species of *Dewalquea* previously described, all of which were apparently tripartite. Among the European species it is quite similar to the Senonian species *Dewalquea insignia* Hos. and v. d. Marck which is, however, entirely distinct. It is also similar to *Dewalquea coriacea* and *Dewalquea pentaphylla* described by Velenovsky from the Cenomanian of Bohemia.

As mentioned above this Alabama species shows entire and serrated forms and it is remarkable that wherever this genus has been found to occur in any abundance, two species are usually described, one entire and one with toothed margins. Thus in Germany *Dewalquea haldemiana* is entire while *Dewalquea insignis* is toothed, and probably both are the leaves of the same plant. In Bohemia *Dewalquea pentaphylla* is entire while *Dewalquea coriacea* is toothed. In the case of the Alabama plant it is believed that the entire and serrate leaves are specifically identical since the material shows a great many gradations in the size of the teeth and great variability regarding the proportions which the entire part bears to the toothed part on single leaflets.

JOHNS HOPKINS UNIVERSITY,
BALTIMORE, MARYLAND

SHORTER NOTES

THE WEEPING WILLOW IN WINTER. — A large weeping willow on the university campus shows, in winter, such a complete change from its "weeping" habit that further information seems desirable. The slender unbranched twigs (one to two feet long),

which in the fall hung vertically from the whole tree, are now curled fantastically upward over the whole tree, giving it a rather bushy appearance. They have so changed their relative position with the parent branches as to be now, with few exceptions, wholly above the point of origin instead of hanging wholly below as in summer. The writer first noticed this in January, 1909, but supposing it well known, gave it no further thought except to look for it this year. In November the branches were still pendant; the next observation, January 1, 1910, showed again the winter condition described above. Has any one observed the phenomenon elsewhere? When does it begin? What changes take place in the spring? How can it be explained? Is there any literature on the subject?

JEAN BROADHURST

A WISCONSIN RIDDLE. — The accounts which the earliest explorers of our country have left of the plants which, for one reason or another, attracted their attention are always interesting, and not infrequently puzzling. Such is the Report of Father Dablon, given in the Jesuit Relations for 1671-72. He describes his new mission of St. François Xavier, at De Pere rapids, on Fox River, Wisconsin. While telling of his missionary labors among the savages, he comments also on the animals and the plants of the vicinage. "Besides the grapes, plums and apples," he writes, "which would be fairly good if the savages had patience to let them ripen, there also grows on the prairies a kind of lime, resembling that of France, but having no bitter taste, not even in its rind. The plant bearing it slightly resembles the fern."

Again he tells how an Indian pointed out to him a medicinal plant, whose root was "employed to counteract snake-bite, God having been pleased to give this antidote against a poison which is very common in these countries. It is very pungent, and tastes like powder when crushed with the teeth. It must be masticated, and placed upon the bite inflicted by the snake." He gathered some of this plant, "for future examination," but records no tests of its efficacy.

What were the plants which the good Father thus describes? Probably botanists familiar with the region may be able to recognize them.

S. B. PARISH